

Applic. No.: 10/612,352
Amdt. Dated April 12, 2005
Reply to Office action of January 12, 2005

REMARKS/ARGUMENTS

Reconsideration of the application is requested.

Claims 1-17 remain in the application. Claims 1, 7, and 12-15 have been amended.

In item 3 on page 2 of the above-mentioned Office action, claims 1-6 have been rejected as being anticipated by Okamura et al. (US 5,855,157) under 35 U.S.C. § 102(b).

In item 6 on page 3 of the above-mentioned Office action, claims 1-17 have been rejected as being unpatentable over Blake (US 3,758,928) in view of Okamura et al. under 35 U.S.C. § 103(a).

As will be explained below, it is believed that the claims were patentable over the cited art in their original form and the claims have, therefore, not been amended to overcome the references. However, the language of the claims has been amended in an effort to even more clearly define the invention of the instant application.

Before discussing the prior art in detail, it is believed that a brief review of the invention as claimed, would be helpful.

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Claim 1 calls for:

A device for cutting side edges of sheet-form material for binding, comprising:

a tool body;

at least one cutting element fixed to the tool body, the at least one cutting element defining at least one cutting edge for cutting a leveled back and at least one notching segment for adding notches into the previously leveled back.

Claim 7 calls for:

A method of cutting side edges of sheet-form material for binding, comprising:

rotating a tool about an axis of rotation at an angle to a cutting plane, the tool having at least one cutting edge and at least one notching segment inside the cutting edge and projecting over the cutting plane; and

cutting the sheet-form material with the at least one cutting edge along the cutting plane for cutting a leveled back and notching the sheet-form material with the notching segment for adding notches into the previously leveled back.

Claim 12 calls for:

A method of making a device for cutting side edges of sheet-form material for binding, comprising:

forming, into at least one cutting element, a cutting edge for cutting a leveled back and a notching element for adding notches into the previously leveled back; and

fixing the at least one cutting element to a tool body.

As admitted by the Examiner, Blake does not disclose a cutting element having both a cutting edge and a notching segment.

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In the technical field of binding books, the terms "cutting" and "notching" are well known. Especially when binding by the application of glue to the sheets, the preparation of the material is performed in two distinct steps. The first step is cutting the material and the second step is notching the material. In book binding, the cutting is performed to level the back of books prior to gluing and the notching is performed to add notches into the previously leveled back of the book to enhance the quality of gluing since the glue can get into the notches.

The steps cannot be reversed, i.e. first notching and then cutting, because the cutting would remove the notches and thus render the notching useless, namely a leveled back would result and the advantage of the notches would be lost.

Okamura et al. teach a saw blade. Although a saw blade seems to be equivalent to a cutting device, it is not in the sense of the invention of the instant application. A saw blade is used for cutting something in two, whereas the cutting device of the invention of the instant application, like a mill, is used to level something. A saw blade is not a mill. Both saw blade and mill rotate and also move in a linear fashion with regard to the work piece. The main difference is that the saw

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blade removes material on the outside of its circumference with a fixed thickness (e.g. the thickness of the saw blade) between two parts of the material to be separated by the saw blade, whereas the mill removes material up to a certain width from one side of the material. It is impossible to separate the material into two parts with a mill.

Okamura et al. teach a saw blade with cutting teeth and biting teeth. However, Okamura et al.'s biting teeth, which might be on top of the cutting teeth as can be seen in Figs. 11-13, Fig. 20, and Fig. 37, are, due to their location, restricted to bite into material that will be entirely removed afterwards by the cutting teeth, so that no trace of the bite of the biting teeth remains when the cutting is completed. This is the exact opposite of the invention of the instant application.

Also, it has to be noted that despite the existence of biting and cutting teeth in the disclosure of Okamura et al., the biting and cutting are not two distinct processes in a way that two results are achieved. Okamura et al.'s only one result is a clear cut, which is performed in two steps: biting and then cutting. In contrast, the invention of the instant application achieves two distinct results, namely a leveled surface due to the cutting and notches in the material due to

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the notching. Thus, Okamura et al. do not disclose a dual functionality (clean cut and notches as in the invention of the instant application), but only a single functionality (clean cut) performed in two steps (biting and cutting).

Okamura et al. actually teach away from the invention of the instant application. This is evident from the very problem that is addressed and shall be overcome by Okamura et al.'s saw blade, namely "that "fluffs" or "returns" are caused to occur upon cutting of wood or the like so that cut surfaces of the wood could not be fine" (see column 1, lines 14 to 17) and "The present invention has been suggested in view of the foregoing problem of conventional saw blade, and is to provide a saw blade which can prevent any "fluff" and "return" from occurring so as to render the finishing work unnecessary, prevent any clogging of the cutting path from occurring with chips discharged from the path in smooth manner and with a chip-receiving capacity increased, render any finishing work of side surfaces of the cut path unnecessary, and allow required cutting power to be minimized" (see column 1, lines 50 to 59).

It is clear that the intention of the invention of the instant application is to create a cut and notched surface, which is the opposite of the smooth surface created by Okamura et al.

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In short, Okamura et al. do not teach the feature "notching" which has to be understood with the feature of "for binding" from the claims of the instant application, and the dual functionality as claimed in the invention of the instant application is also absent in the teaching of Okamura et al.

As has been discussed above, Okamura et al. do not disclose cutting and notching, because there are no notches after the cut, but teach biting and cutting, the two steps having the same functionality, namely creating a smooth surface after the cutting as opposed to a dual functionality namely a level surface and notches in the level surface as in the invention of the instant application.

It is accordingly believed to be clear that none of the references, whether taken alone or in any combination, either show or suggest the features of claims 1, 7, and 12. Claims 1, 7, and 12 are, therefore, believed to be patentable over the art and since all of the dependent claims are ultimately dependent on claims 1, 7, or 12, they are believed to be patentable as well.

—In view of the foregoing, reconsideration and allowance of claims 1-17 are solicited.

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In the event the Examiner should still find any of the claims to be unpatentable, counsel would appreciate a telephone call so that, if possible, patentable language can be worked out.

If an extension of time for this paper is required, petition for extension is herewith made. Please charge any fees which might be due with respect to 37 CFR Sections 1.16 and 1.17 to the Deposit Account of Lerner and Greenberg, P.A., No. 12-1099.

Respectfully submitted,

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